



Incorporating Sustainability in Workplace Design

EPA Region 9 Space Redesign Project

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Overview



1. Project Goals
2. Sustainability in Design
3. Employee Engagement
4. Design Concepts
5. Lessons Learned



Project Goals



- Reduce leased space footprint by up to 20%
- Create space that represents EPA's mission and incorporates LEED & sustainable design
- Use project to message procurement shift towards sustainability
- Adopt new technologies and space design concepts
- Expand meeting & collaboration spaces
- Incorporate best practices in mobile workplace design



Sustainability in Design

Sustainability in Procurements



Procurement	Certification	EPA SF Project	Benefits
Building (Operations)	LEED EBOM EnergyStar	Platinum 99%	Energy & Water Reduction
Building (Interior) Finishes	LEED CI Greenguard	Platinum	Occupant comfort No/low VOCs Recycled Content No formaldehyde
Appliances	EnergyStar	EnergyStar High Efficiency	Energy & Water Reduction
IT Technology	EnergyStar EPEAT	Data Center Air Side Economizer	Energy Reduction Cradle to Grave
Furniture	BIFMA	Level 3	No PVCs
Demountable Walls	BIFMA	Level 2	Recycled Content Cradle to Grave
HD Shelving	BIFMA		Recycled Content No VOCs



Less Paper Requires Less Space



- Removing paper from floors allows more light and views, and improves circulation (remove lektriers)
- “Paperless” is not achievable, “Less Paper” is
 - Huge cultural change involved
- Leverage federal experts – NARA
- Purge, purge, purge!
- Consolidate reference and historical files in records center
- Archive the past, “scan forward” the future



Zero Waste Saves \$\$



- Waste Generation Trending Down
- Diversion at 95.4% in CY2013
- Saved \$45,873 in disposal costs



Technology = Mobility =



Internal Mobility

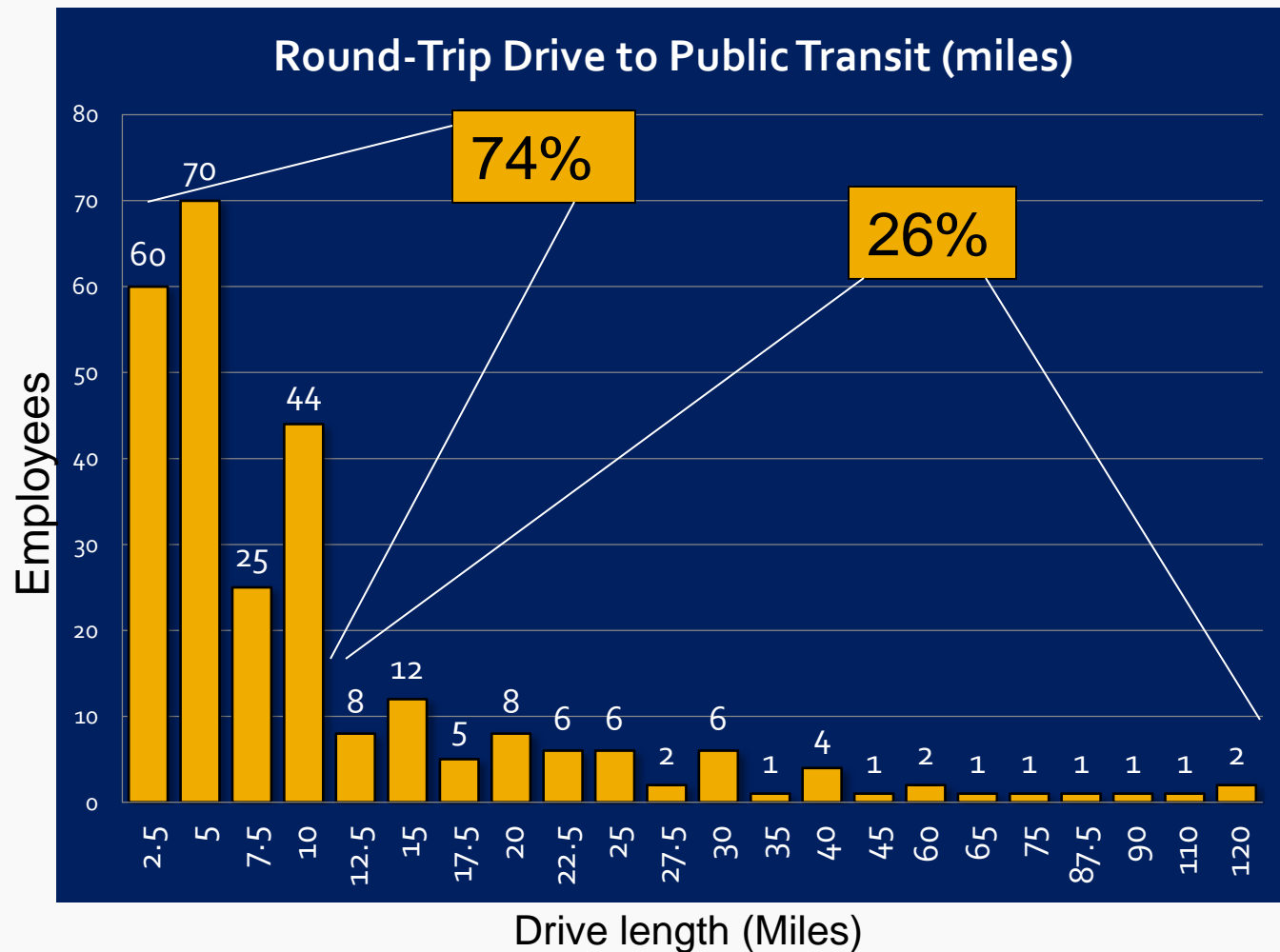
- Laptops & docking
- Wireless access
- Multi-function Devices
 - Print, copy, scan
- Meeting spaces with supportive technologies



External Mobility

- Soft tokens for all
 - Connection to Intranet
 - Access to 95% of Agency systems and databases
 - More work becomes portable
- VOIP – “find me follow me”
- Adobe Connect and laptop cameras improve interactivity

Telework = Sustainability



Equivalent To:

- 1.1 million car-miles per year (48% total)
- 110 tons CO₂/year (58% total)

Telework = Lease Savings



EPA SF Now

- No more than 2 days/week telework allowed
- 2% of workforce telecommutes 2 days/week
- Occupy 64 ft² workstation that sits empty at least 2 days/week

**Space and \$ Savings
Eliminates 70+ workstations**

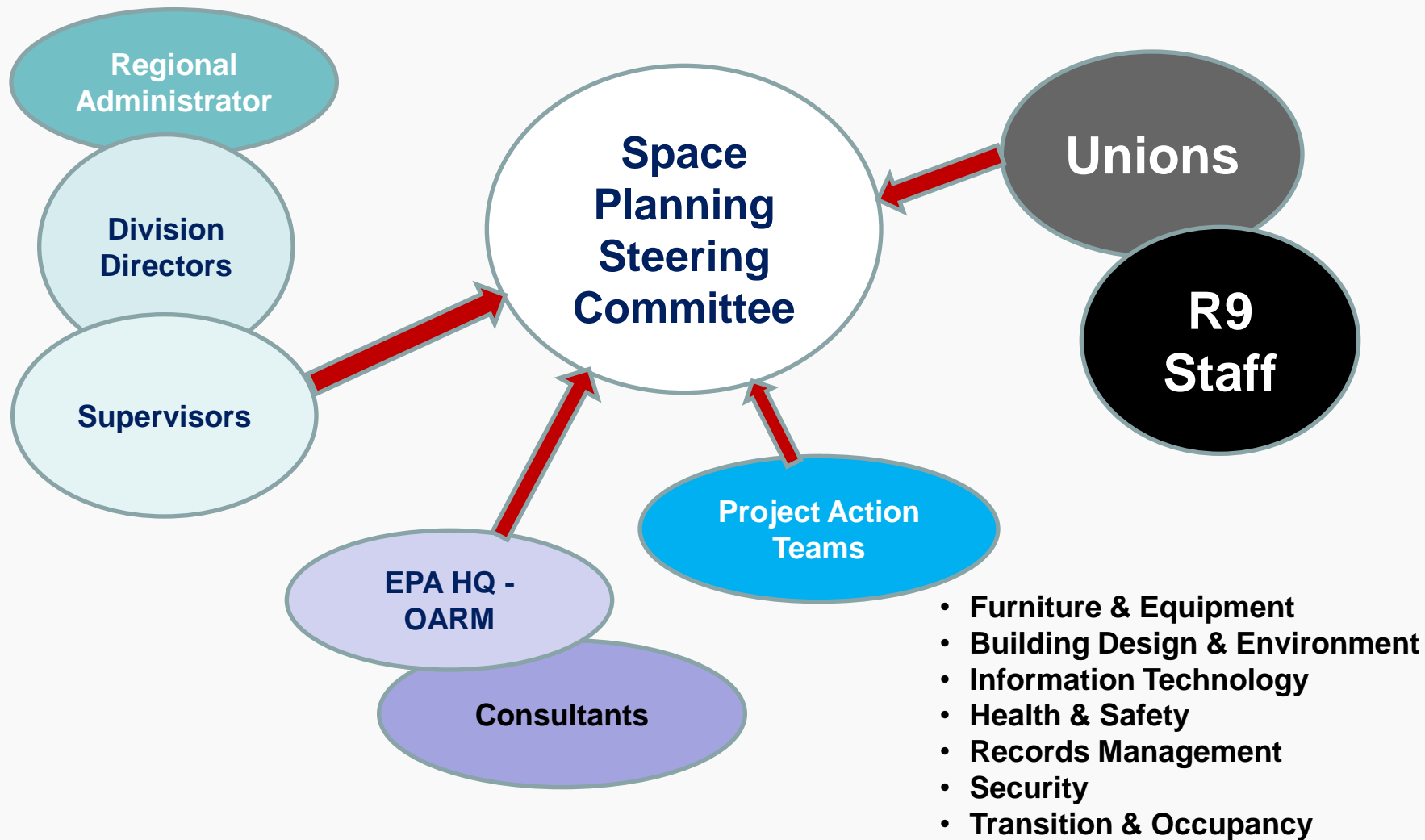
EPA SF 2015

- Up to 5 days/week of telework
- 10% of workforce telecommutes \geq 3 days/week
 - These telecommuters sit at unassigned 30 ft² touchdown workstations
- Share ratio is 2 : 1
- Those who telecommute \leq 2 days/week assigned 60 ft² workstation



Employee Engagement

Decision Making Process





Design Concepts

EPA R9 Design Framework



- No offices on perimeter windows
- Maximize natural lighting
- Improve floor circulation and way finding
- Create open workspace with mobile reconfigurable workstations in smaller neighborhoods
- Significantly increase type and size of meeting and collaboration space



EPA R9 Design Framework...



- Add new amenities on each floor (pantries, water bottle filling stations)
- Remove bulk of records from floor and consolidate into Regional Records Center
- Get away from hospital white – embrace color!
- Aim for LEED CI Platinum



Design Components

- Break up floor into 6-8 smaller neighborhoods divided by offices and meeting rooms.
- Offices moved away from windows
- All employees have access to daylight
- Most Division files moved to central Records Center

Furniture Features

- One adjustable work surface
- 60 sf & 30 sf workstations, easily resized as needed
- New ergonomic desk chairs
- "Green" materials

Floor Features

- Wireless network access throughout entire building
- Laptop & docking station at most workstations
- More conference and informal meeting rooms
- Enclosed pantry/break area on each floor
- 2-person "quiet" rooms for conference/private calls



Seating Capacity: 98

Meeting Capacity: 122

Negotiation and Arbitration



Management

- 42" Solid + 12" Clear Glass
- No back

Unions

- 67" Solid Panels
- Fully Enclosed
- Sliding Door

The Compromise

- 42" Solid + 12" Frosted Glass (67%)
- 56" Solid (33%)
- No back

Typical Floor

View From Floor Lobby – South into Conference Rooms



Color and Finish Board



T7b, T7c - Occasional Table Top
Knoll Laminate, Bright White 118



T7b, T7c - Base Paint for Occasional Table
Knoll Platinum PL



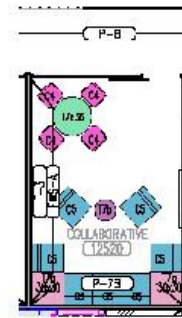
T7a - Wired Side Table Finish
National Wood, Maple, MA04NOF



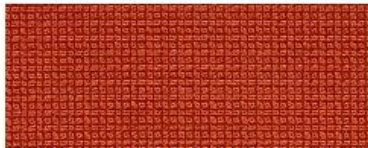
C5, T7a - Paint for Seating & Side Table Legs
National 501 Platinum Metallic Paint



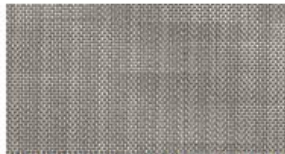
C4 - Jofco Stool, Base Finish
Linen on Maple



C4 - Upholstery for Jofco Stool
Maharam - Metric - 003 Fleece



C5 - Upholstery for Modular Seating (Back)
Maharam - Metric - 013 Lava



C5 - Upholstery for Modular Seating (Seat)
Knoll - Vibe - K1029/13 - Glam



C5 - Bench Throw Pillow
Knoll - Eclat Weave - Scarlet



T7c Knoll Saarinen Table 36" Dia
Height: 15 1/4"
Laminate: White
Base: Platinum
Size: 35 3/4" dia



C5 - National Swift Modular Seating Armless Seat w/Back
Base/Leg: Paint National 501 Platinum Metallic Paint

T7b - Knoll Saarinen Occasional Table
20" h, 20" dia.
Top finish: Knoll Laminate - Bright White 118
Base: Knoll Paint, Platinum PL



T7a - National Swift Wired Side Table
Finish: National Wood, Maple
Base/Leg: Paint National 501 Platinum Metallic Paint



C4 - Jofco Collective Motion Stools
With back, on casters
Base: Linen on Maple
Leg/Wheel Finish: Silver

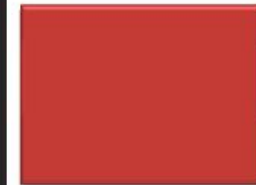


Date 2/15 E15
12th Floor Collaborative
Atypical
12520
Red Scheme

Architectural Finishes



F-3 Fabric Wrapped Panels
Maharam, Glint, 901380 Oyster, 002



P-7B Accent Paint Walls
Sherwin Williams, Million Dollar Red, 2003-10



CPT-4 Carpet
Shaw, Contract, Absorbed Tile, 5T003 - Optics



P-8: Accent Paint (core wall)
Benjamin Moore; Pashmina AF-100



Lessons Learned

(so far)

Education and Understanding



- Offices aren't always the solution
- Dispel myths with facts

- Audio privacy
- LEED
- Acoustics



- Bring in experts to share best practices (DEGW, GSA)
- Arrange workplace site tours for key influencers
- Working collaboratively with unions takes a lot of time

Communication and Decisions



- Change starts at the top
- Management must all speak with the same voice
- Have clear understanding of what's negotiable with unions
- Make the input and decision process clear to all
- Huge cultural changes are involved
 - Consider engaging a change management consultant
- Provide some opportunity for individual choice



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